



000066895

10 February 1996

Reviewers:

Mark Burmeister
Susan Myrick
Wayne Sproles
Marla Broussard
Susan Evans
Steve Luker

Please review the attached PAM and provide your comments to me b y 14 February, 8:00 am. This PAM is the result of a meeting with EPA/ CDPHE/DOE on the 6 February pertaining to the stabilization of structures. Going generic in the earlier draft of the PAM was "too great a step" for them to take right now. They prefer a tank-specific PAM.

This version will be faxed to the EPA/ CDPHE/DOE/KH today. We will be teleconferencing on Wednesday, 14 February to resolve comments. Therefore, I will appreciate your comments as soon as possible.

Again, formatting is not my strong suit. Jan will do that on Monday. I want you to review this PAM for technical content and approach.

Mark, help me. The logic escapes me. Why are we foaming the tank if your "rinsing" activities show success in removing the contaminants, ie no TCLP concentrations remain, no rads remain? In theory, there are no residuals remaining that could continue to "pollute" the localized groundwater. The foaming of the tank seems an unnecessary expense to me in these circumstances. The way I read the *SAP* and the *Plan*, there are no action levels, no performance goals. Nothing. So do we proceed with foaming regardless of the contaminants, or lack thereof, residing in the rinsed tanks?

I appreciate your review comments.

Ann

cc John Schmuck
Bruce Peterman

ADMIN RECCRD

1A-A-000808

1/19
DECLASSIFICATION
REVIEW IN PROGRESS
ADMINISTRATIVE

DRAFT
PROPOSED ACTION MEMORANDUM
FOR THE CONTAMINANT STABILIZATION OF UNDERGROUND STORAGE TANKS

10 February 1996

DRAFT
PROPOSED ACTION MEMORANDUM
FOR THE CONTAMINANT STABILIZATION OF UNDERGROUND STORAGE TANKS

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ACRONYMS

| | |
|--------|---|
| ARAR | applicable and relevant and appropriate requirements |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| IHSS | individual hazardous substance site |
| NEPA | National Environmental Policy Act |
| PAM | proposed action memorandum |
| RCRA | Resource Conservation and Recovery Act |
| RFETS | Rocky Flats Environmental Technology Site |
| UST | underground storage tank |

DRAFT
PROPOSED ACTION MEMORANDUM
FOR THE CONTAMINANT STABILIZATION OF UNDERGROUND STORAGE TANKS

1.0 PURPOSE

This accelerated removal action is proposed to support the stabilization of potential contaminants in seven Interagency Agreement underground storage tanks (USTs) located at the Rocky Flats Environmental Technology Site (RFETS). This removal action is designed to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release of removable contaminants (CERCLA, 42 USC9601, Sec. 101(23)). This removal action proposes to use polyurethane foam, an inert material, to fill the tanks to prevent possible contaminant migration into the surrounding groundwater.

The seven underground storage tanks include the following:

| <u>Tank Number</u> | <u>Building</u> | <u>Individual Hazardous Substance Site (IHSS)</u> |
|--------------------|-----------------|---|
| Tanks 2 and 3 | 441 | 122 |
| Tank 10 | 776 | 132 |
| Tank 14 | 774 | 124.1 |
| Tank 16 | 774 | 124.2, 124.3 |
| Tank 40 | 889 | 121 |
| Tank 4 | 443 | 129 |

Six of the underground storage tanks are described in detail in the *Accelerated Action Plan for Inter-Agency Agreement Underground Storage Tanks Containing RCRA-Regulated Materials* (DOE-RFFO, December 1995). The seventh tank, tank 4 of individual hazardous substance site (IHSS) 129 is described in the *Final Draft, OU10 Proposed Action Memorandum for the Building 443 Underground Fuel Oil Tanks #3 and #4 Accelerated Response Action* (DOE-RFFO, December 1994).

2.0 PROJECT DESCRIPTION

The idea behind stabilizing the underground storage tanks is to prevent the migration of any residual contamination left in the UST after its contents have been removed, and the tank has been multi-rinsed. The inert material used to stabilize the contamination is designed to stabilize the possible remaining contamination until a final action is authorized for the unit, such as a Record of Decision or a Resource Conservation and Recovery Act (RCRA) Closure Plan.

The inert material selected for this project was evaluated based on its material availability, effectiveness and handling properties, structural integrity, the future use or disposition, and cost. Polyurethane foam was chosen for this particular application primarily for the ease in the future disposition of the tank should removal of the underground storage tank become necessary during the decontamination and demolition of the associated buildings. Polyurethane foam is much lighter in weight than other substitute inert materials, such as concrete, 2 pounds per cubic foot versus 145 pounds per cubic foot. Therefore, the foam-filled USTs will be retrieveable, via lifting out with a crane, during the final disposition of the associated buildings and surrounding area.

3.0 PROJECT APPROACH

3.1 Removal Action Objectives

Stabilizing possible residual contamination in underground storage tanks is consistent with the RFETS long-term objective to achieve accelerated risk reduction and cost-effective stabilization of the Site. By completing the

stabilization, further migration of contaminants will be prevented by fixing any remaining contamination and minimizing risk to human health and the environment.

3.2 Proposed Action

Prior to stabilizing the underground storage tanks, the tanks will be prepared to meet the contractor specifications for stabilization. The contents of the tanks will be removed and managed according to its characteristics. All of the tanks will be triple rinsed prior to the stabilization with the polyurethane foam.

3.3 Waste Management

Wastes generated during the stabilization activities will be evaluated and handled appropriately according to its characteristics. Wastes may include leftover foam which can be disposed in the sanitary landfill onsite. Groundwater that may have infiltrated into the tank between the rinsing effort and the foaming exercise will be managed in accordance with its characteristics.

4.0 ENVIRONMENTAL IMPACTS

The National Environmental Policy Act (NEPA) requires that actions at RFETS be evaluated for potential impacts to the environment. Impacts to the natural environment resulting from this removal action will be minimal and are not expected to result in any adverse impacts to wetlands, floodplains, threatened or endangered species or their habitats, and historic or cultural resources.

5.0 COMPLIANCE WITH APPLICABLE AND RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

In accordance with the Interagency Agreement (IAG), an objective of accelerated actions at the RFETS is the identification and compliance with federal and state ARARs that are associated with this proposed action. There are no ARARs relating to this proposed action of stabilizing rinsed underground storage tanks with polyurethane foam.

6.0 IMPLEMENTATION SCHEDULE

The stabilization for all seven tanks is scheduled to commence in the third and fourth quarters of fiscal year 1996. These dates are projected from the work package; any delays, scope, or budget changes may affect these dates.

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20 March 1996

INTEROFFICE MEMORANDUM

TO: Marla Broussard
Mark Burmeister
Zeke Houk
Michael O'Rell
Steve Paris
Wayne Sproles

FROM: Ann Tyson

SUBJECT: **Public Meeting for Ryan's Pit PAM Modification and Foaming of Tanks
PAM**

The public meeting for the above mentioned PAMs is scheduled for next Wednesday, 27 March, at the Ramada Inn in Westminster. Located at Sheridan and Hwy 36. Ann Sieben is scheduling the presentations for either 7:30 pm and 8:00pm, or 8:30 and 9:00 pm. Originally, Ann planned to present the information to the public, but she may be out of town on business that evening. I am requesting that at least one representative from each of the projects (Ryan's Pit, CERCLA tanks, IHSS 129) plan to attend the meeting.



AGENDA

**Environmental Restoration Quarterly
Public Information Meeting
March 27, 1996
Westminster Hotel**



- 6:30 IntroductionDennis Connors (K-H)**
- 6:35 Individual Hazardous Substance Site 109Ann Sieben (K-H)**
(Ryan's Pit) Proposed Action Memorandum
Public Hearing
- 7:00 Contaminant Stabilization of UndergroundAnn Sieben (K-H)**
Storage Tanks Proposed Action Memorandum
Public Hearing

Ann-

presented PAM on Framing

appreciates brevity of PAMs

however too much brevity

* what are takes constructed of
if what mat'ls did they hold?

+ request in future to include more information

from RF advisory board

Ken

No other comments

No questions

3/27/96

6:30 pm public mtg

GENERAL TANK INFORMATION

Accelerated Action Plan for Six IAG, Underground Storage Tanks

Approved by the State: January 30, 1996

PAM for Stabilization (Foaming)

**Open for Public Comment:
February 23, 1996 to March 24, 1996**



Accelerated Action Plan for Six IAG Underground Storage Tanks

| <u>Tank</u> | <u>Volume</u> | <u>History</u> | <u>Comments</u> |
|-------------|---------------|---------------------------|--|
| 2, 3 | 3,000 gal | partly removed in 1966 | liquid 1.79 pCi/ml gross alpha |
| 10 | (2)4,500 gal | abandoned in 1982 | liquid <2 nCi/ml; sludge 800 nCi/ml gross alpha |
| 14 | 30,000 gal | abandoned in 1989 | liquid 1×10^5 pCi/l; sludge 3×10^5 pCi/l gross alpha |
| 16 | (2)14,000 gal | abandoned in 1989 | precipitate 5×10^4 pCi/g; sludge 5.2×10^5 pCi/g gross alpha |
| 40 | (2)400 gal | abandoned in 1982 | <2 nCi/ml liquid |



Accelerated Action Plan for Six IAG Underground Storage Tanks

Two Regulatory Paths:

- 1. Maintenance Activities (RCRA Operating Permit)**
- 2. Corrective Action (CERCLA, PAM in Public Comment)**

Enforceable IAG Milestone - complete action by September 30, 1996



Accelerated Action Plan for Six IAG Underground Storage Tanks

- 1. Remove remaining inventory and ancillary equipment as appropriate.**
- 2. Rinse tanks 3 times, analyzing rinsate to evaluate performance.**
- 3. If RCRA performance standards are:
(a) met - "close" tank;
(b) not met but close - rinse again, go back to (a); or
(c) not met and not close - document for interim closure.**
- 4. Inject polyurethane foam.**
- 5. Perform final remedy consistent with ASAP (e.g. in association with building D&D; under cap,. . .)**

Note: Tank 4 of IHSS 129 will be handled the same way.



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cc Wayne Spoles
Mark Burmeister ✓
for Admin Record
file

ROCKY FLATS

ENVIRONMENTAL RESTORATION QUARTERLY

PUBLIC INFORMATION MEETING

Ramada Inn
8773 Yates Drive
Westminster, Colorado

Ann Sieben
Fax 4046

Ann Tyson
Fax 4046

Wednesday, March 27, 1996

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I N D E X

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- 2 Speaker:
- 3 Ken Korkia
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1 P R O C E E D I N G S

2 (Whereupon, the following is a partial transcript
3 of proceedings as requested.)

4 MR. KORKIA: I'm Ken Korkia with the Rocky Flats
5 (inaudible) that I appreciate your (inaudible) these PAM
6 documents. That's a--for someone who has to actually read
7 these and try to make sense of them, I appreciate the
8 brevity. However, on this one I want to comment that there
9 was too much brevity.

10 First of all, the--when you're reading about tanks,
11 there's two questions that come to mind: What are the tanks
12 constructed of? And what are the tanks used to hold? And
13 that information wasn't available in the PAM document itself,
14 so it wasn't self-contained. There were references to other
15 documents, it was a (inaudible) site. I can't remember the
16 exact wording, but there was two references for where that
17 information could be found. And so I do have access to a
18 library where I could find that information, but I wonder
19 about other people who might receive this or request that
20 document who don't have access to the library who wouldn't
21 have been able to find out that information, and they would
22 have to go through a more circuitous process in order to find
23 out that information.

24 So, it wouldn't have been that much to add just that
25 little bit of information, so I would request in the future

16

1 that if you talk about tanks, remember always to include a
2 little bit of information on what they're made and what used
3 to be in them so we can evaluate whether we approve of a
4 closure plan for them.

5 Thanks.

6 (Whereupon, the requested portion of the meeting
7 was concluded.)

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REPORTER'S CERTIFICATE

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I, JEANNIE STAKER, do hereby certify that I was present at and recorded the proceedings in the foregoing matter; that I thereafter reduced my recorded tapes to typewritten form, comprising the foregoing transcript; further, that the foregoing transcript is a full and accurate record of the proceedings in this matter on the date set forth.

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Dated in Denver, Colorado, this 1st day of April,

1996.

Jeannie Staker

STATE OF COLORADO

Roy Romer, Governor
Patti Shwayder, Acting Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

4300 Cherry Creek Dr. S.
Denver, Colorado 80222-1530
Phone (303) 692-3300
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222 S. 6th Street, Room 232
Grand Junction, Colorado 81501-2768
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Fax (303) 248-7198



Colorado Department
of Public Health
and Environment

May 16, 1996

Bob April
Lead, Stakeholder and Environmental Liaison Group
Department of Energy
Rocky Flats Office
P.O. Box 928
Golden CO 80402-0928

RE: Final Proposed Action Memorandum (PAM) for the Contaminant Stabilization of Underground Storage Tanks

Dear Mr. April:

The referenced PAM has been reviewed by the Colorado Department of Public Health and Environment and the Environmental Protection Agency. The response to comments received during the public comment period are adequate and the revised PAM is therefore approved.

If you have any questions regarding these matters, please contact [REDACTED] 692-3358.

Sincerely,

Susan Chaki
Corrective Action Unit Leader
Federal Facilities Program

cc: Dave George, EAG-DOE
Tim Hedahl, Kaiser-Hill
Ann Sieben, Kaiser-Hill
Ann Tyson, RMRS
Tim Rehder, EPA
Laura Perrault, AGO
Steve Tarlton, RFPU

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|---|------------------------|
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| Phone # | Phone # |
| Fax # <u>966-8244</u> | Fax # |

19/19